Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band	)	ET Docket No. 98-237

COMMENTS OF ECHOSTAR COMMUNICATIONS CORPORATION

EchoStar Communications Corporation ("EchoStar") hereby files these comments in response to the Notice of Proposed Rulemaking released in the above-captioned matter.[1] EchoStar, through its wholly-owned subsidiaries, is a provider of DBS programming services in the United States. EchoStar operates four satellites that allow it to provide hundreds of channels of digital television programming to over 2 million subscribers throughout the continental U.S. In addition, EchoStar Satellite Corporation ("ESC"), a wholly-owned subsidiary of EchoStar, currently holds a license to provide GSO FSS services in the Ka-band.

EchoStar's interest in the Extended C-Band NPRM is two-fold. **First**, one of EchoStar's subsidiaries, Directsat Corporation, currently operates a DBS satellite located at

[1] See In the Matter of Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band, Notice of Proposed Rulemaking, FCC 98-337 (rel. Dec. 18, 1998) ("Extended C-Band NPRM"); see also 64 Fed. Reg. 2462 (1999).

119.05° W.L. and performs Telemetry, Tracking and Control ("TT&C") functions in the extended C-band. Any action by the Commission to limit Directsat's use of the extended C-band for reliable TT&C operations would jeopardize the satellite and the services its provides to EchoStar's consumers. Accordingly, EchoStar requests that the Commission clarify, as part of the Extended C-Band NPRM, that Directsat will be able to continue its TT&C operations in the extended C-band. To protect the satellite's safety, it is essential for the Commission to rule that any future non-government fixed service providers will not be entitled to protection from, and will not cause interference to, Directsat's TT&C operations in the few current, or likely future, locations of earth stations conducting TT&C communications with that satellite. Furthermore, Directsat's operations may require additional earth stations conducting TT&C communications with that satellite. Therefore, the Commission should exempt from the freeze on accepting further earth station applications in that band requests for earth station authorizations for TT&C communications with satellites already authorized to conduct their TT&C functions in the band.

Second, EchoStar Satellite Corporation ("ESC"), another wholly-owned subsidiary of EchoStar, currently holds a license to provide GSO FSS services in the Ka-band.[2] ESC, along with 8 other Ka-band licensees, petitioned the Commission on August 7, 1997 for a rulemaking to designate limited portions of the extended C-band for TT&C functions of Ka-band

---

[2] In the Matter of EchoStar Satellite Corporation: Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, 13 FCC Rcd. 5664 (1997).

systems, due to the proven reliability of the C-band.[3] To delete the FSS allocation in the extended C-band, as suggested in the Extended C-band NPRM, would preclude this designation, prejudice the petition and deprive Ka-band licensees of reliable TT&C operations. Accordingly, EchoStar supports retaining the FSS allocation for the extended C-band.

I. DIRECTSAT SHOULD BE PERMITTED TO CONTINUE TT&C OPERATIONS IN THE EXTENDED C-BAND

In the Extended C-Band NPRM, the Commission proposes to allocate the 3650-3700 MHz band to the non-Government fixed service on a primary basis.[4] EchoStar does not oppose this primary designation, so long as Directsat is permitted to continue TT&C operations in the extended C-band for its satellite at 119.05° W.L. without interference from the new services. On September 9, 1996, the Commission authorized Directsat to provide TT&C functions in the 5923.0-5924.0 MHz, 6426.0-6427 MHz and 3698.3-3699.7 MHz frequency bands.[5] The Commission's authorization was conditioned upon Directsat providing TT&C

---

[3] See In the Matter of Amendment of Parts 2 and 25 of the Commission's Rules to Designate Extended C-Band Spectrum for TT&C Functions of GSO FSS Systems Operating in Bands Above Ku-band, Petition for Rulemaking (filed Aug. 7, 1997).

[4] Extended C-Band NPRM at ¶ 1.

[5] See In the Matter of Directsat Corporation, Order, 11 FCC Rcd. 22375, 22378-79 (1996) ("Directsat TT&C Order"). While the terms of this order authorized Directsat to perform TT&C operations through January 1, 1999, Directsat recently filed a request for extension of its TT&C authority through the term of its license, i.e., November 26, 2006. See Request of Directsat Corporation for Extension of Authority, File No. SAT-MOD-19981215-00101 (filed Dec. 15, 1999).

functions over these bands on a "non-interference, non-protected basis."[6] While the non-interference requirement was acceptable to Directsat in light of the then (and current) light usage of that band, it is essential to the continued safety of the satellite that the new services not cause interference to Directsat's operations, and that Directsat not be required to protect the new services. This restriction on the new services would only be applicable near the current, or likely future, locations of earth stations communicating with Directsat's satellite, including: Hawley, Pennsylvania, Twin Peaks, California,[7] Cheyenne, Wyoming[8] and Gilbert, Arizona.[9]

To date, Directsat has performed its TT&C functions without causing any reported incident of harmful interference to any authorized user of the extended C-band spectrum. Since the frequency bands used by Directsat for TT&C operations involve only a narrow portion of the extended C-band (i.e.,1.4 MHz), Directsat is confident that its TT&C operations can be accommodated if the band is used for non-government services, such as the

---

6 Directsat TT&C Order, 11 FCC Rcd. at 22377.

7 Hawley and Twin Peaks are the sites used by Loral, EchoStar's TT&C contractor.

8 Cheyenne is the site of EchoStar's uplink facility. EchoStar has pending before the Commission earth station applications for TT&C communications from Cheyenne in this spectrum. See EchoStar North America Corporation, Call Sign E950253, File No. 490-DSE-MP/L-98 (filed June 29, 1998); EchoStar North America Corporation, Call Sign E980118, File No. 473-DSE-MP/L-98 (filed June 29, 1998).

9 Gilbert, Arizona is the location of an earth station complex that EchoStar is in the process of acquiring from American Sky Broadcasting LLC. See Application for Consent to Assignment of Authorizations and Request for Expedited Consideration (filed Dec. 2, 1998). While there are no current plans to locate an earth station communicating with Directsat's satellite in that complex, efficiencies may warrant such a deployment in the future.

fixed-services set forth in the Extended C-Band NPRM, without imposing undue restrictions on those services except in a limited "sliver" of spectrum and in a few geographical locations.

To deny Directsat the ability to continue its TT&C operations in the extended C-band would cause Directsat to lose its satellite and cause irreparable harm to more than 2 million DBS subscribers. Together, the satellites of EchoStar and Directsat are used to provide between 140 and 150 video channels and several audio channels, to consumers throughout the continental United States. Directsat's inability to use the extended C-band would cause an enormous waste of private resources that would in turn deprive consumers of the full range of advanced and innovative DBS services delivered today by Directsat. Loss of the satellite would also not be in the public interest since it would seriously disrupt EchoStar's ability to provide competition to incumbent cable operators – a long standing Commission goal. Accordingly, the Commission must clarify that the rules and allocations contemplated by the Extended C-Band NPRM would not deny Directsat the ability to continue its TT&C operations in the extended C-band on a non-interference and non-protected basis.

In addition, the Commission should limit the freeze on acceptance of new earth station applications announced in the NPRM.[10] The vital TT&C operations will almost certainly require the use of additional earth stations in the future. The Commission should therefore

---

[10] In the Extended C-Band NPRM, the Commission stated that "license applications for new earth stations, major amendments to pending earth station facilities applications, or applications for major modifications to existing earth station facilities filed on or, after the release date of this [NPRM] will not be accepted." Extended C-Band NPRM at ¶ 13 (footnotes omitted).

introduce an exception from the "freeze" for requests for earth station authorizations to conduct TT&C communications with satellites that are already authorized to conduct such important communications in the extended C-band, including Directsat's DBS satellite. If left unqualified, the freeze would jeopardize the ability of Directsat to preserve the health of its satellite.

II. ECHOSTAR SUPPORTS USE OF THE EXTENDED C-BAND FOR GSO FSS SATELLITE OPERATIONS

EchoStar does not support deleting the FSS allocation in the extended C-band.[11] EchoStar Satellite Corporation ("ESC"), another wholly-owned subsidiary of EchoStar, currently holds a license to provide GSO FSS services in the Ka-band.[12] ESC, along with other Ka-band licensees, petitioned the Commission on August 7, 1997 for a rulemaking to designate limited portions of extended C-band spectrum for TT&C functions of GSO FSS systems operating in bands above the Ku-band.[13] These petitioners have identified small portions of the extended C-band as being optimal for performing TT&C operations for Ka-band systems and other systems operating at frequencies above the Ku-band.

---

[11] See Extended C-Band NPRM at ¶14 ("We also seek comment on whether the FSS allocation in the band should be deleted.").

[12] In the Matter of EchoStar Satellite Corporation: Application for Authority to Construct, Launch, and Operate a Ka-band Satellite System in the Fixed-Satellite Service, 13 FCC Rcd. 5664 (1997).

[13] See In the Matter of Amendment of Parts 2 and 25 of the Commission's Rules to Designate Extended C-Band Spectrum for TT&C Functions of GSO FSS Systems Operating in Bands Above Ku-band, Petition for Rulemaking (filed Aug. 7, 1997) ("Ka-band Petition").

Specifically, in the Ka-band Petition, ESC and the other petitioners seek Commission authorization to use 10 MHz of extended C-band spectrum (3600-3700 MHz band (space to Earth) and 6425-6525 MHz band (Earth to space)) for TT&C operations due to the proven reliability of the C-band for TT&C operations. As set forth in the Ka-band Petition, petitioners do not believe that providing TT&C operations in higher bands is practical.

> Although it may be technically feasible to perform TT&C operations in the 30/20 GHz bands and in higher frequencies, such a requirement would place substantial operational constraints on these next-generation satellite systems. For example, the use of the Ka-band or higher frequencies for TT&C would require the use of non-standard equipment, specially designed high-power Ka-band amplifiers, and significantly larger ground antennas to achieve the required reliability. Use of such equipment will result in substantial technical and operational difficulties, which indicates that frequencies above Ku-band are not technically or economically suitable for TT&C operations of GSO FSS satellites operating in significantly higher frequency bands.[14]

Thus, the requested designation would solve a long-standing problem – the identification of reliable spectrum for the TT&C communications of the proliferating number of new satellite systems. Accordingly, the Commission should not delete the FSS allocation in the extended C-band, thereby depriving Ka-band licensees of the possibility of obtaining reliable TT&C operations.

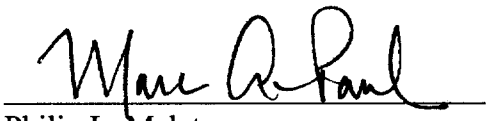
---

[14] Id. at 4.

III. CONCLUSION

For the foregoing reasons, EchoStar respectfully requests that the Commission: (1) preserve Directsat's use of the extended C-band for TT&C operations; (2) allow Directsat to submit earth station applications in connection with its TT&C operations; and (3) not delete the FSS allocation in the extended C-band so that GSO FSS systems, like the Ka-band systems, may have access to reliable TT&C operations.

EchoStar Communications Corporation

By: 

David K. Moskowitz
Senior Vice President and General Counsel
EchoStar Communications Corporation
5701 South Santa Fe
Littleton, CO 80120

Philip L. Malet
Pantelis Michalopoulos
Marc A. Paul

Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036
202-429-3000

Its Attorneys

Dated: February 16, 1999